

# Soil Amendments for ESC and SW

## Inspectors

3 Hour Continuing Education Course



## Module 1

Introduction



## Ground Rules

- Keep cell phones off during the training
- Questions and comments are encouraged
- Everyone will have an opportunity to speak and share their thoughts at the appropriate times
- Be supportive of all participants



## Agenda

8:30 – 8:45    Module 1 – Introduction  
8:45 – 10:00   Module 2 – Compost and other Soil Amendments  
10:00 – 10:15   Break  
10:15 – 11:45   Module 3 – Bioretention Media

**"A Nation that destroys its soil destroys itself" -- Franklin D. Roosevelt**



## Course Objectives

1. Provide a detailed look at why we would use soil amendments in erosion and sediment control
2. Provide an overview of what soil amendments are available for use in erosion and sediment control and stormwater management
3. Provide an overview of the use of compost amendments in stormwater management
4. Provide a review of the use of bioretention media, inspection of these media and maintenance



You are what you eat

Poor soil: shallow, low fertility,  
low organic matter, high bulk  
density, low infiltration



Good soil: deep, high fertility,  
high organic matter, low bulk  
density, high infiltration



Poor soil: shallow, low fertility,  
low organic matter, high bulk  
density, low infiltration

# You are what you eat

Good soil: deep, high fertility,  
high organic matter, low bulk  
density, high infiltration



But also

Good soil

Low  
erodibility

High  
Infiltration

A photograph showing a steep, grassy hillside adjacent to a paved road. The grass is lush green, and the slope appears stable, demonstrating low erodibility.

A photograph of a house with a green lawn. In the foreground, there is a large pile of dark brown soil, likely from a recent landscaping project, illustrating good soil.

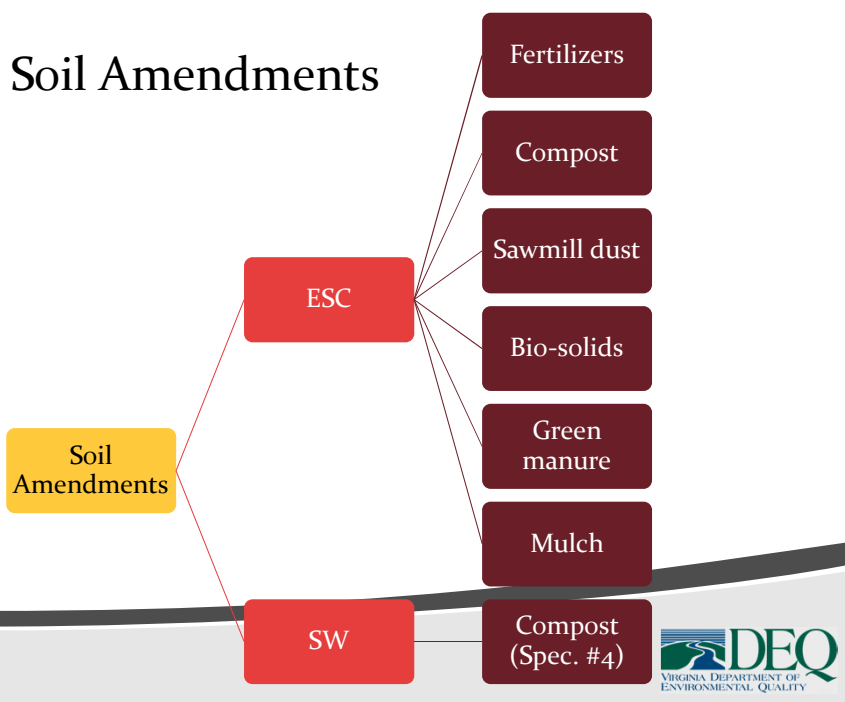
A photograph of a street scene with a large pile of dark brown soil next to a road. The soil is piled up next to a concrete curb, and the surrounding area is wet, suggesting high infiltration.

## How do we ensure we have good soil?

- a) Minimize disturbance and protect the undisturbed
- b) Stockpile the topsoil, treat it well and spread it according to recommendations
- c) Avoid unnecessary compaction
- d) Analyze soil for fertility
- e) Adjust the soil fertility by fertilizing and/or application of organic matter
- f) Mulch

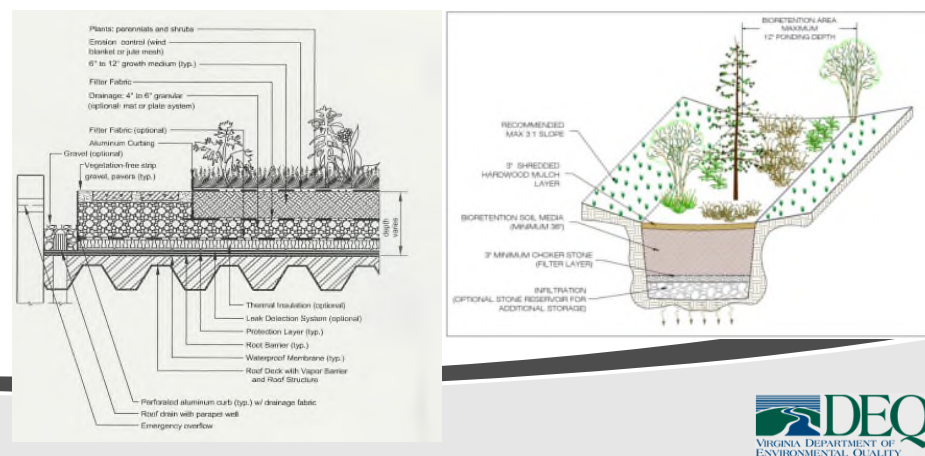


## Soil Amendments



## Bioretention

- Only used in stormwater management



## Other DEQ Continuing Ed. Classes that discuss soils:

- Applied Soil Concepts for ESC & SWM (**6CU**)
- Plants for Erosion and Sediment Control & Stormwater Management (**6CU**)
- Overview of Wetlands for ESC & SWM Professionals (**6CU**)